

87-627-16277
9/88

**GEOLOGICAL AND GEOCHEMICAL
REPORT ON THE
SUGAR LAKE PROPERTY
LAF AND LAF III CLAIMS**

Record Nos. 2153 and 2160
Vernon Mining Division
North Latitude $50^{\circ}30'30''$ ~~$30''$~~ $27'36''$
West Longitude $118^{\circ}31'30''$ ~~$30''$~~ $06''$
N.T.S. 82L - 7E

FILMED

Owner/Operator
GERLE GOLD LTD.
904 - 675 West Hastings Street
Vancouver, B.C. V6B 1N2

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

March 1987

16,277

C.A. HRKAC

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SUMMARY

In September 1986, a reconnaissance exploration programme was carried out to determine the location of a massive sulphide showing visited by R. Hrkac in the mid-1960's. This showing was reported to be 4 metres in width with values in gold, copper and zinc.

A total of ten days was spent in the area on two separate visits. During this time two showings were located, sampled and staked. The upper showing consists of a silicified, mineralized outcrop, 3 to 9 metres in width, containing pods of massive pyrrhotite with chalcopyrite, sphalerite and minor magnetite, which occurs at the contact between fresh diorite and gneiss and the Monashee Group.

Float containing similar mineralization was found upstream from the showing giving it a possible strike length of over 300 metres. Other evidence of the showing's extension could be seen marked by gossanous areas in a cliff face along strike.

The lower showing has the same characteristics of the upper showing but on a much smaller scale. Massive pyrrhotite with chalcopyrite, sphalerite and minor magnetite mineralization found at the gneiss diorite contact was traced over a distance of approximately ten metres and had a maximum width of ten centimetres.

Results from rock geochemistry showed significant values in copper and zinc with anomalous gold, silver, nickel and cobalt.

The work to date suggests the following geologic concept:

1. Mineralization occurs at the contact of diorite sills and gneiss.
2. The thickness of the mineralized zone is proportional to the thickness of the diorite sill.
3. Diorite float found in the creek bed over a vertical distance of 600 m indicates that additional mineralized zones may exist in a layered fashion within this distance.

INTRODUCTION

In September of 1986, a two man reconnaissance crew was deployed to locate a massive sulphide showing reported to be located at the northwest end of Sugar Lake. This led to the discovery of two massive sulphide showings located approximately 0.5 km and 1.5 km west of the northwest end of Sugar Lake. These showings are now referred to as the Sugar Lake property and are owned by Gerle Gold Ltd.

In early September 1986, the LAF claim consisting of six units was staked to cover the upper showing pending assay results. A further six units were staked in late September 1986, the LAF III claims, to cover the lower showing.

This report presents the details and results of the exploration programme.

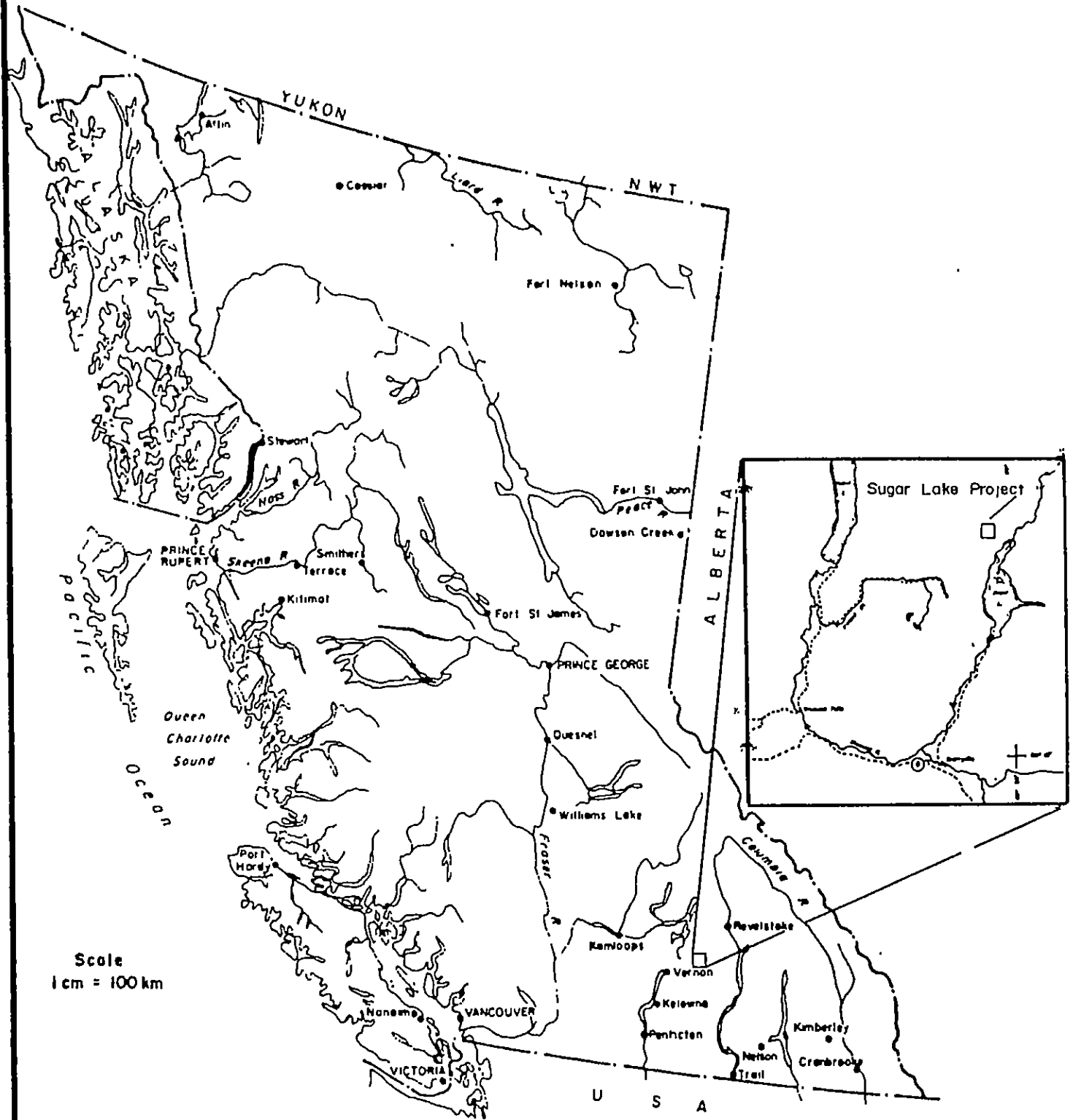
LOCATION AND ACCESS

The LAF claims are located at the northwest end of Sugar Lake approximately 60 air km east-northeast of the town of Vernon and approximately 40 air km northeast of the village of Lumby (Figure 1) within the Vernon Mining Division.

Access is by paved highway from Lumby to Cherryville and then north via paved road and a good gravel logging road to the northwest end of Sugar Lake. From this point access is by foot up moderate to steep slopes on the west side of Sugar Lake. The claims are centred at about the 1400 m elevation approximately 1.5 km from the lake shore.

GEOLOGY

The LAF claims lie within the Omineca Crystalline belt, a north-northwesterly trending sequence of rocks consisting mostly of volcanics, intrusives, sediments and metamorphic rocks. Locally, the LAF claims are underlain by rocks from the Shuswap Metamorphic Complex which is a series of highly to weakly metamorphosed volcanics and sediments of Archean or later age. Rocks in the immediate area of the claims are of the Monashee Group which are comprised of predominantly high grade metamorphic rocks and consist mostly of various types of gneiss, with lesser amounts of schist, quartzite, marble, slate and limestone.



GERLE GOLD LTD.
 SUGAR LAKE PROJECT
 LOCATION MAP

FIGURE 1

Within the property itself the rocks are dominated by gneiss of the Monashee Group which contains some minor quartzite beds. At about the 1300 m elevation on the property the gneiss is in contact with a fine to medium grained diorite which is likely related to the Coast Range Intrusions. The contact between these two rock types is usually very sharp but in places can be gradational. Overall the contacts on the prospects are less than 10° suggesting the diorite unit may be occurring as sills with the diorite at the upper showing being approximately 100 m thick and capping the gneiss.

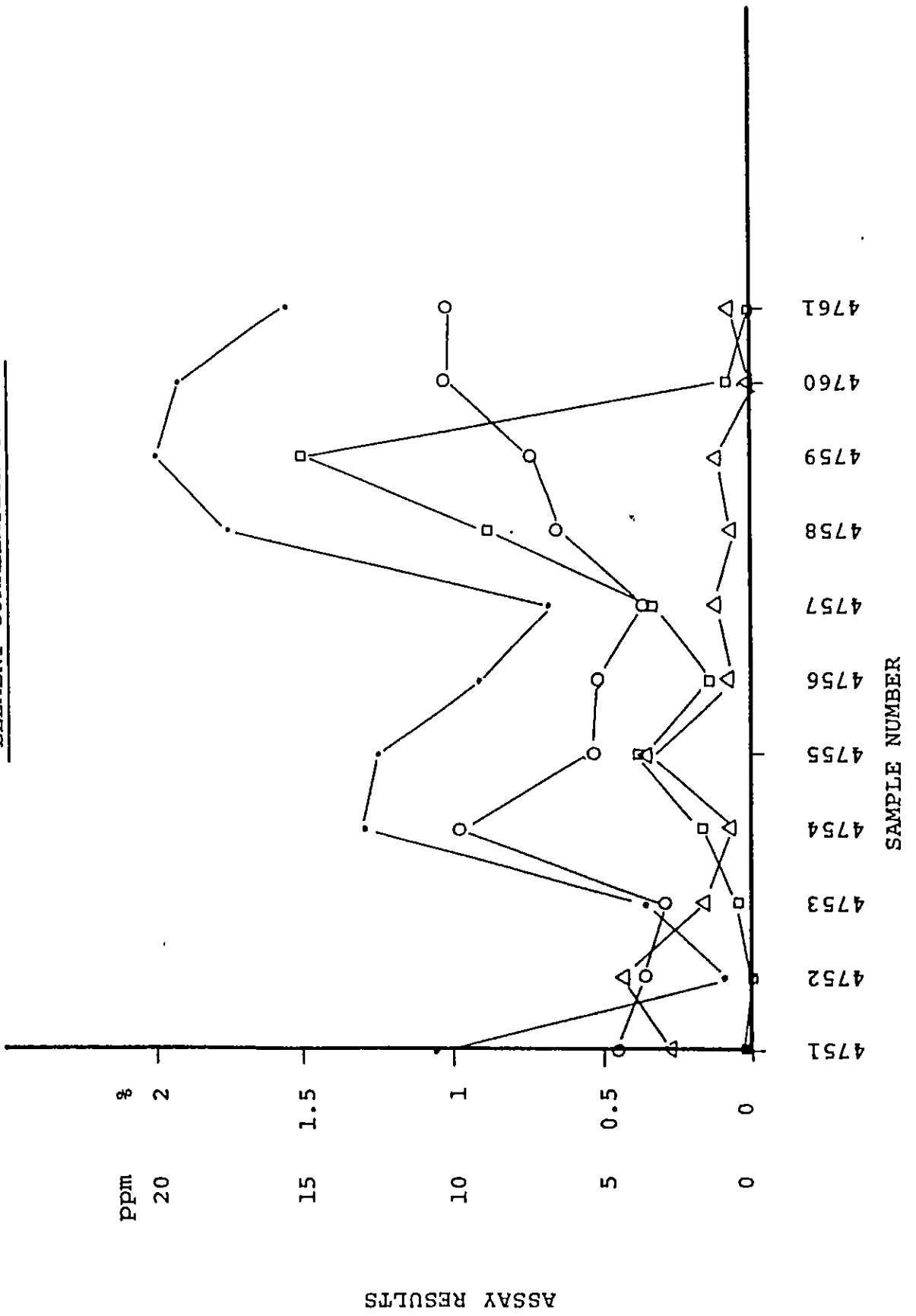
MINERALIZATION

The upper showing on the property is situated on the LAF claim at the gneiss-diorite contact and completely within the gneiss at an elevation of 1350 m. The zones of mineralization are marked by areas of intense gossans composed of limonite and goethite which vary in thickness, where visited, from 3 to 9 m. The exact thicknesses are difficult to determine due to gossanous material being transported down the rock face. The zone is considered to be at least 300 m in length as the gossans could be traced along the cliff face and mineralized float was found about 300 m along strike northwesterly from the main showing. The pinching and swelling nature of the zone suggests that a thickening of the zone along the contact is a possibility. The gneiss within the mineralized sections was found to be very siliceous and contained some minor secondary quartz veins. The most significant mineralization occurs as disseminated siliceous pods containing massive sulphides where the sulphide content is usually greater than 90%. These massive sulphide pods were found to be up to 1 metre by 2 metres in size with pyrrhotite being the dominant sulphide and lesser amounts of chalcopyrite, pyrite, sphalerite, graphite and magnetite.

Six one metre chip samples were taken from within the mineralized pods and sent in for analysis along with one grab sample and four float samples. Significant results were obtained in copper and zinc from the majority of the samples along with anomalous values in Au, Ag, Ni and Co (Appendix I).

It should be noted that the highest gold values (448 ppb) were obtained from a float sample which contained less than 50% sulphides but abundant quartz. This combined with the fact that there seems to be no correlation between gold and any of the other analyzed elements (Figure 2) suggests that any gold may be occurring as free gold in the quartz. This should be kept in mind during any future sampling programme.

FIGURE 2
ELEMENT CORRELATION CHART



ASSAY RESULTS

● Cu %
 □ Zn %
 ○ Ag ppm
 △ Au ppm

The lower showing is situated on the LAF III claims and has similar characteristics to the upper showing. This showing is significantly smaller in size being approximately 10 metres in length and up to 10 centimetres in width. The mineralization is situated at an elevation of 700 metres at a gneiss diorite contact on the northeast bank of a creek which dissects the LAF III claims. The diorite sill at this locality is less than 1 metre thick. Mineralization is discontinuous along its 10 metre strike length occurring as massive pods of pyrrhotite, chalcopyrite, pyrite, sphalerite, graphite and minor magnetite.

CONCLUSION

Massive sulphide mineralization was found in place in two locations on Gerle Gold's Sugar Lake property. The mineralization in both showings consists primarily of massive pyrrhotite with chalcopyrite in quartz. The upper showing occurs within a gossanous siliceous gneiss zone at the contact of a diorite unit. This mineralized zone seems to be nearly flat lying and varies from 3 to 9 metres in thickness, where visited, with a possible strike length of over 300 metres. The pinching and swelling nature of this zone suggests that a thickening of the zone along the contact is a possibility.

The lower showing has the same characteristics of the upper showing on a smaller scale having an approximate strike length of 10 metres and a maximum thickness of 10 centimeters. Significant Cu, Zn values along with anomalous Au, Ag, Ni, Co values were obtained from samples taken from the mineralized zones. Evidence suggests that gold may be occurring as free gold in the quartz.

It is concluded that a series of diorite sills occurs over a vertical extent of 600 metres and that the size of the sills has a direct correlation to the amount of mineralization produced. The massive sulphide mineralization at these contacts is of economic significance and further work is warranted to determine their potential.

RECOMMENDATIONS

Only a small section of the upper mineralized zone was sampled therefore further sampling along with prospecting should be carried out to determine the full extent of the zone. As some of the mineralized zone exists along cliff faces mountaineering techniques will be required to sample the occurrences.

If encouraging results are obtained from the detailed sampling, then a series of drill holes could be used to test the lateral and depth extent of the massive sulphide zone.

Prospecting along diorite contacts should be conducted to check for additional mineralized horizons over the 600 m vertical extent of available outcrop.

CERTIFICATION

I, Christopher Andrew Hrkac of Vancouver, British Columbia, do certify that:

1. I am an exploration geologist residing at 4419 West 9th Avenue, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia.
3. I have practised as an exploration geologist in British Columbia for five years.
4. Information contained in this report is based on work performed by myself or under my supervision, during the period of September 1986.

Respectfully submitted,



C.A. Hrkac, B.Sc.
Geologist

Vancouver, B.C.
March 1987

APPENDIX I
ASSAY RESULTS

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

RECEIVED

OCT 9 1980

GEOCHEMICAL REPORT

To: Gerle Gold Ltd.
904 - 675 West Hastings
Vancouver, B.C.
V6B 1N2

Number: 86305
Date: September 15, 1980
Proj.:

Attn: Ray Hrkac

	Au ppb	Ag ppm	Pt ppb	Pd ppb	Cu ppm	Ni ppm
4751	296	4.5	<25	<5	184	118
4752	448	3.7	<25	<5	57	11
4753	168	3.0	<25	<5	170	124
4754	120	9.9	<25	<5	204	126
4755	136	5.4	<25	<5	105	70
4756	88	5.1	<25	<5	44	26
4757	128	3.6	<25	<5	126	96
4758	64	6.5	<25	<5	128	93
4759	152	7.4	<25	<5	143	102
4760	16	10.3	<25	<5	62	42
4761	72	10.1	<25	<5	194	124

Erica S. Siedman

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

GEOCHEMICAL REPORT

To: Gerle Gold Ltd.
904 - 675 West Hastings
Vancouver, B.C.
V6B 1N2

Number: 86305
Date: September 15, 1986
Proj.:

Attn: Ray Hrkac

	Cu ppm	Mo ppm	Sb ppm	Zn ppm	Pb ppm	.W ppm
4751	10600	40	<10	180	10	< 2
4752	1000	23	<10	10	30	< 2
4753	3600	24	<10	50	20	< 2
4754	13000	33	<10	1700	20	< 2
4755	12500	21	<10	3800	20	< 2
4756	9200	14	<10	1500	15	< 2
4757	6800	19	<10	3400	15	< 2
4758	17500	25	<10	8900	15	< 2
4759	20000	31	<10	15000	10	< 2
4760	19300	13	<10	880	10	< 2
4761	15500	27	<10	190	20	< 2

Duncan Macdonald

CDN RESOURCE LABORATORIES LTD.

#8, 7550 RIVER ROAD, DELTA, B.C. V4G 1C8 / TEL. (604) 946-4448

001 8 1988

GEOCHEMICAL REPORT

To: Gerle Gold Ltd.
904 - 675 West Hastings
Vancouver, B.C.
V6B 1N2

Number: 86340
Date: October 2, 1988
Proj.: Sugar Lake

Attn: Ray Hrkac

	Au ppb	Ag ppm	Pt ppb	Pd ppb	Cu ppm
4762	< 5	4.7	< 25	< 5	380 15,000
4763	< 5	0.5	< 25	< 5	380
4764	< 5	0.5	< 25	< 5	222
4765	< 5	0.6	< 25	< 5	77
17526	50	0.1			
17527	< 5	1.0	< 25	< 5	1,960
17528	45	0.8	< 25	< 5	335
17529	< 5	0.9	< 25	< 5	270
17530	< 5	0.4	< 25	< 5	115
17531	< 5	0.3	< 25	< 5	126
S3-1	< 5	0.1	< 25	< 5	10
S4-1	< 5	0.1	< 25	< 5	12

	Zn ppm	Ni ppm	Co ppm
4762	650	14	19
4763	24	188	31
4764	13	146	26
4765	13	21	4
17527	180	33	34
17528	23	88	43
17529	25	96	41
17530	4	22	19
17531	10	23	11
S3-1	17		
S4-1	22		

Duncan Sanderson

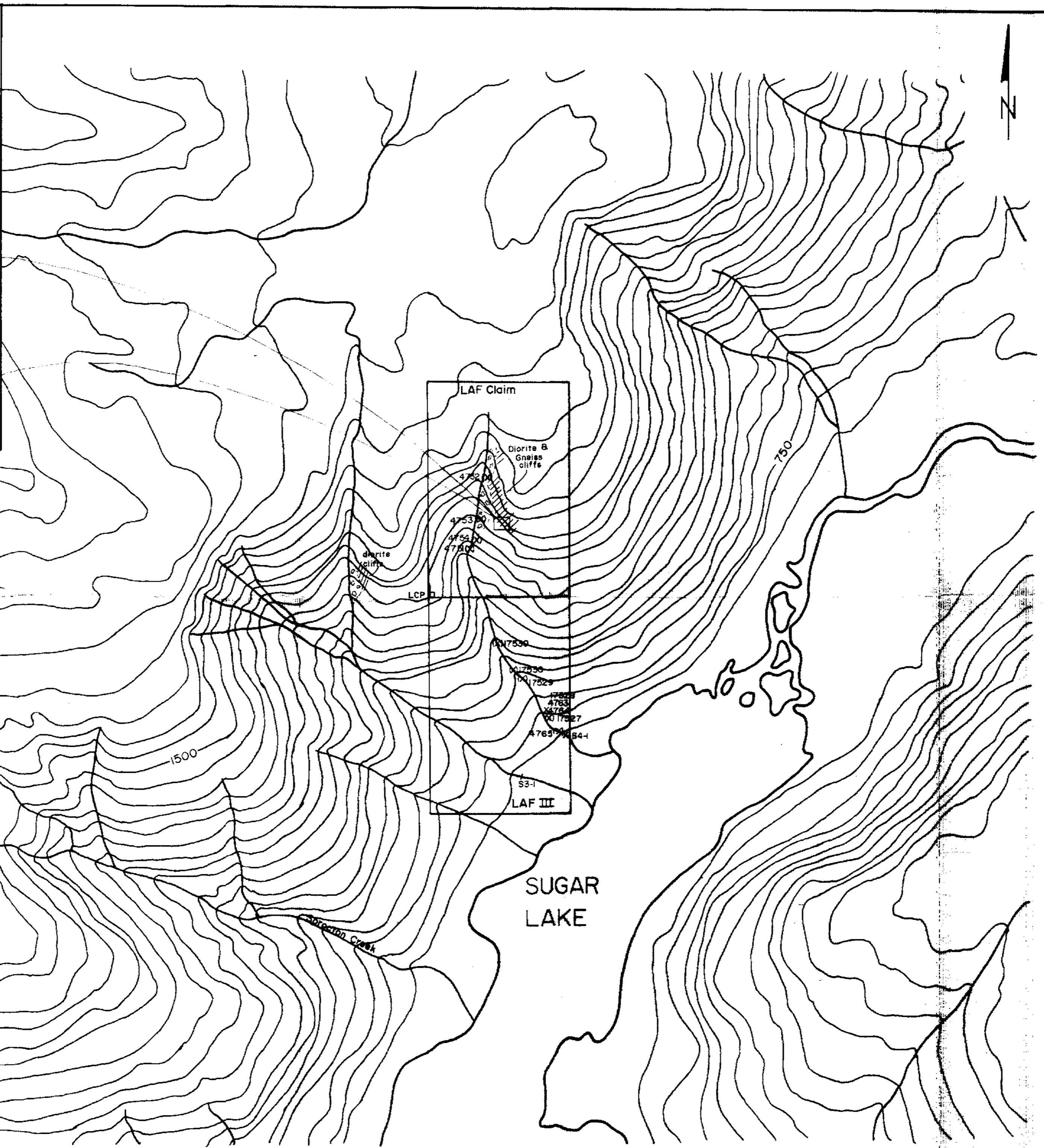
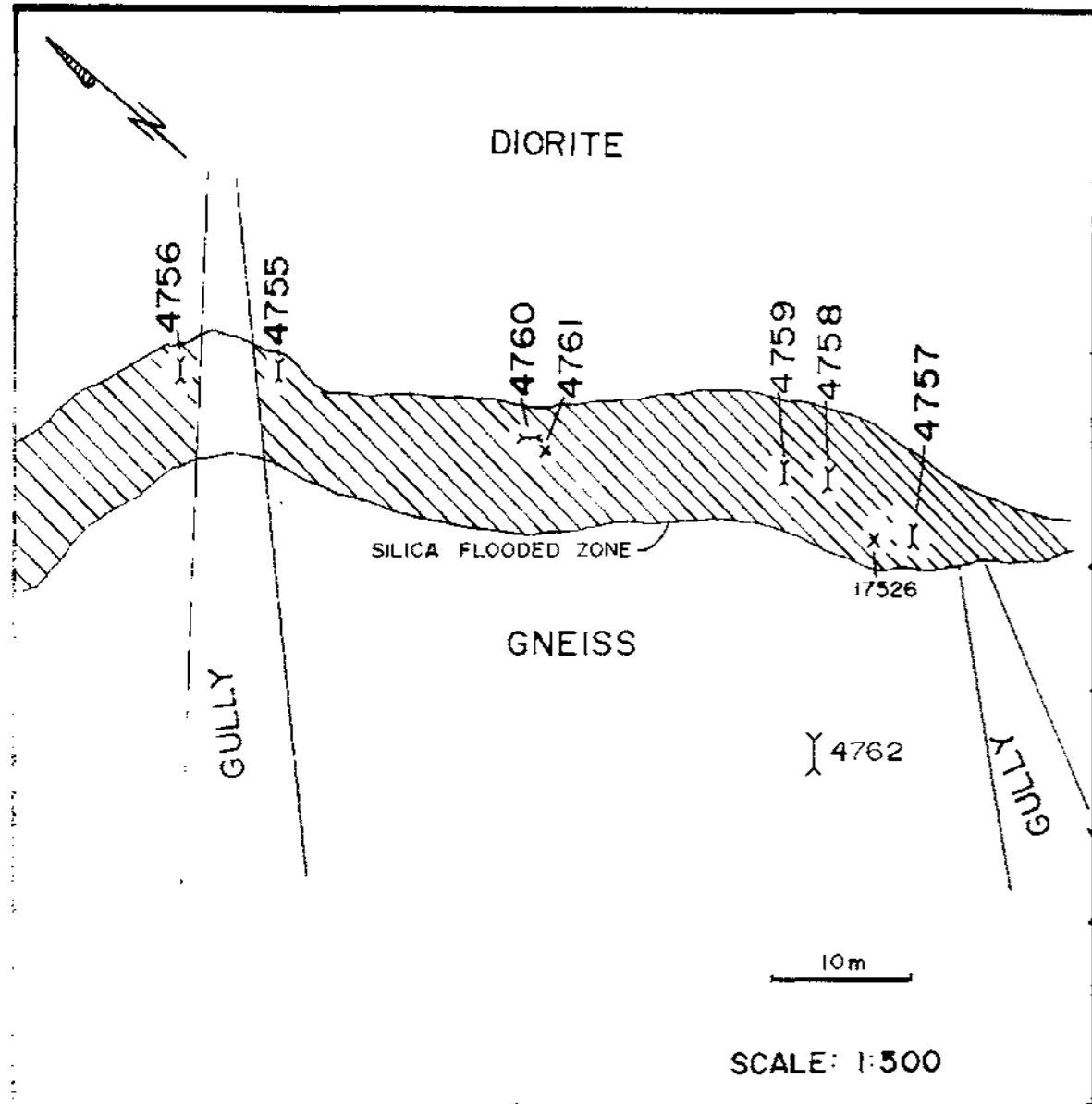
APPENDIX II
COST STATEMENT

APPENDIX II
COST STATEMENT

GEOLOGY, GEOCHEMISTRY, STAKING
SEPTEMBER 1 - SEPTEMBER 27, 1986

Salaries & Wages

R.A. Hrkac - Supervision	3 days @ \$335/day	\$1,005.00
C.A. Hrkac - Geologist	14 days @ \$120/day	1,680.00
K. Cawston - Helper	14 days @ \$110/day	1,540.00
Supplies & Equipment		37.65
Food & Accommodation		778.65
Vehicle Rental	2866 km @ .25/km	716.50
Fuel		135.64
Claim Staking		84.00
Assays		331.10
Drafting		185.00
Report Preparation		<u>55.00</u>
TOTAL		\$6,548.54 =====



ASSAY'S

Sample No.	Au (ppb)	Ag (ppm)	Cu (%)	Zn (%)
4751	296	4.5	1.06	0.018
4752	448	3.7	0.1	0.001
4753	168	3.0	0.36	0.005
4754	120	9.9	1.30	0.17
4755	136	5.4	1.25	0.38
4756	88	5.1	0.92	0.15
4757	128	3.6	0.68	0.34
4758	64	6.5	1.75	0.89
4759	152	7.4	2.00	1.50
4760	16	10.3	1.93	0.08
4761	72	10.1	1.55	0.02
4762	5	4.7	1.50	0.07
4763	5	0.5	0.04	0.002
4764	5	0.5	0.02	0.001
4765	5	0.6	0.008	0.001
17526	50	0.1		
17527	5	1.0	0.20	0.018
17528	45	0.8	0.04	0.002
17529	5	0.9	0.03	0.002
17530	5	0.4	0.01	0.0
17531	5	0.3	0.01	0.001
S3-1	5	0.1	0.001	0.002
S4-1	5	0.1	0.001	0.002

- LEGEND**
- TALUS
 - AREA OF CLIFFS
 - TRENCH
 - 4751 ASSAY TAG No.
 - x(x) ROCK SAMPLE LOCATION (in place, float)
 - S3-1 SILT SAMPLE LOCATION

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

16,277

SCALE
1:20,000

50m Contours

GERLE GOLD LTD.
SUGAR LAKE PROJECT 82L-7E
VERNON M.D. B.C.

COMPILATION MAP

DATE: SEPT. 1986 BY: C. H.